

From: [Berg, Marlene](#)
To: [Crumbling, Deana](#); [Tzhone, Stephen](#)
Cc: [Poore, Christine](#); [Bartenfelder, David](#)
Subject: RE: Minutes of Arkwood Meeting 4/29/15
Date: Thursday, April 30, 2015 9:29:40 AM

Thanks, Deana.

From: Crumbling, Deana
Sent: Thursday, April 30, 2015 8:54 AM
To: Tzhone, Stephen; Berg, Marlene
Cc: Poore, Christine; Bartenfelder, David
Subject: RE: Minutes of Arkwood Meeting 4/29/15

All,

I would like to slightly refine some wording in the minutes related to my data evaluation. See **red text**

--Deana

From: Tzhone, Stephen
Sent: Wednesday, April 29, 2015 4:52 PM
To: Berg, Marlene
Cc: Poore, Christine; Crumbling, Deana; Bartenfelder, David
Subject: RE: Minutes of Arkwood Meeting 4/29/15

I just want to confirm that this demonstration (see highlight) would consist of these three parts:

- soil dioxin sampling of cover to ensure its below 730 ppt dioxin PRG
- gw dioxin sampling of possible pathways to ensure non-leaching and transport of dioxin
- ICs in place

Please clarify or confirm, thanks.

From: Berg, Marlene
Sent: Wednesday, April 29, 2015 3:32 PM
To: Tzhone, Stephen
Cc: Poore, Christine; Crumbling, Deana; Bartenfelder, David
Subject: Minutes of Arkwood Meeting 4/29/15

Steve T, Carlos, Chris V, Jon, Ghassan, and contract support
Marlene and Deana.



9595657

Ground water tracer study.

Region 6 has been working with Scott Huling from ORD/Ada who will be sending comments on tracer report.

Dave B is deferring to Ada.

Cleanup Levels

- We support calculation of 730 pg/g for a soil screening level for industrial use and 12,100 pg/g for maintenance worker.
- Maintenance worker for current land use, industrial for future land use. As we consider both current and future land use in determining protectiveness, we support the use of 730 pg/g as a soil screening level for the site.

Principal Threat Levels

- OSRTI will confirm with Region 6 that dioxin-contaminated soil beneath the soil cover does not constitute principal threat waste. This applies to toxicity of dioxin in soil, not mobility.
- PRP will need to demonstrate that 6 in soil cover can safely contain low-level waste w/r to direct contact and migration to ground water.

Site TEQ concentrations

- Deana has provided rationale for why unadjusted, not adjusted, TEQ concentrations is appropriate.
- Deana has provided additional comments for the PRP that the formula used in their report to calculate the Chebyshev UCL is slightly incorrect (in the square root term containing the alpha value). This formula error produces an incorrect value for the Chebyshev UCL that is slightly lower than actual. The relatively small difference between the erroneous UCL and correct UCL calculations does not affect conclusions for any of the Site DUs when comparing the 95% Chebyshev UCL to the TEQ soil screening level of 730 ppt. ; these comments do not actually affect TEQ concentrations.

Soil Cover

- Unadjusted TEQ concentrations are below 730 pg/g

Site areas beyond soil cover

- Unadjusted TEQ concentrations have been found above 730 pg/g for all DUs except DU for soil cover.

Beyond Site Boundary

- Unadjusted TEQ concentrations have been found above 730 pg/g from DU 5 and DU 7 which are beyond site boundary.
- Additional work will be needed to determine extent of contamination/risk beyond site boundary in addition to DU 5 and DU 7 areas.